

Attorney Docket No. 13DV-13124-2 (07783-0149-D2)
Application No. 10/663,320

C) AMENDMENTS TO THE CLAIMS

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This listing of the claims will replace all prior versions and listings of the claims in the application.

1. (Canceled).
2. (Canceled).
3. (Canceled).
4. (Canceled).
5. (Canceled).
6. (Canceled).
7. (Canceled).
8. (Canceled).
9. (Canceled).
10. (Canceled).
11. (Canceled).
12. (Canceled).
13. (Canceled).
14. (Canceled).
15. (Canceled).
16. (Canceled).
17. (Currently Amended) A method for orienting with respect to an article surface a plurality of non-spherical particles, comprising the steps of:

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disposing non-spherical metal particles in a non-metallic and electrically non-conductive medium having a viscosity which can be increased, each particle including a major dimension, and each particle being capable of being moved by a force applied to each particle;

the medium being in a fluid condition with the viscosity selected to provide a selected surface tension in the medium;

disposing the medium with the particles on a surface of an a gas turbine engine component article, the article surface having a complex, three-dimensional, non-planar shape; and

maintaining the medium in the fluid condition for a time selected to enable the surface tension to locate at least about 50% of the plurality of particles with the major dimension in a position generally along the article surface in respect to which each particle is disposed, the particles being physically separated from one another—such that the medium remains electrically non-conductive.

18. (Previously Presented) The method of claim 17 in which the medium with the particles is disposed in a coating of a plurality of superimposed layers on the article surface, each of the plurality of superimposed layers containing the particles.

19. (Previously Presented) The method of claim 18 in which each layer has a thickness in the range of about 0.008-0.012".

20. (Canceled).

21. (Previously Presented) The method of claim 18 in which each layer is maintained in the fluid condition for a time prior to a disposition of a subsequent superimposed layer to enable a combination of gravity and surface tension to locate at least about 60% of the plurality of particles in the coating with the major dimension in the position.

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22. (Previously Presented) The method of claim 21 in which each layer has a thickness in the range of about 0.008-0.012".
23. (Previously Presented) The method of claim 18, wherein the article surface is curved.
24. (Canceled)
25. (Canceled)
26. (Currently amended) A method for orienting with respect to an article surface a plurality of non-spherical particles, comprising the steps of:
 - disposing non-spherical metal particles in a non-metallic and electrically non-conductive matrix having a viscosity which can be increased, each particle including a major dimension, and each particle being capable of being moved by a force applied to each particle;
 - the matrix being in a fluid condition with the viscosity and concentration selected to provide a selected surface tension in the matrix;
 - disposing the matrix with the particles on a surface of an gas turbine engine component article, the article surface having a complex, three-dimensional, non planar shape; and
 - maintaining the matrix in the fluid condition for a time selected to enable surface tension to locate at least about 50% of the plurality of particles with the major dimension in a position generally along the article surface in respect to which each particle is disposed, the particles being physically separated from one another such that the matrix remains electrically non-conductive.
27. (Previously Presented) The method of claim 26 in which the article is a component of a gas turbine engine.

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28. (Previously Presented) The method of claim 26 in which the matrix with the particles is disposed in a coating of a plurality of superimposed layers on the article surface, each of the plurality of superimposed layers containing the particles.

29. (Canceled)

30. (Previously Presented) The method of claim 26 in which the matrix is maintained in the fluid condition for a time to enable a combination of gravity and surface tension to locate at least about 60% of the plurality of particles in the coating with the major dimension in the position.

31. (Previously Presented) The method of claim 28 in which each layer is maintained in the fluid condition for a time prior to a disposition of a subsequent superimposed layer to enable a combination of gravity and surface tension to locate at least about 60% of the plurality of particles in the coating with the major dimension in the position.

32. (Currently Amended) A method for orienting with respect to an article surface a plurality of non-spherical particles, comprising the steps of:

disposing non-spherical metal particles in a non-metallic and electrically non-conductive medium having a viscosity of which can be increased, each particle including a major dimension, and each particle being capable of being moved by a force applied to each particle;

the medium being in a fluid condition with a viscosity and a concentration selected to provide a selected surface tension in the medium;

disposing the medium with the particles on the a gas turbine engine component article surface, the article surface having a complex three-dimensional, non-planar shape; and

maintaining the medium in the fluid condition for a time selected to enable a combination of gravity and surface tension to locate at least about

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50% of the plurality of particles with the major dimension in a position generally along the article surface in respect to which each particle is disposed, the particles being physically separated from one another such that the medium remains non-conductive.

33. (Canceled)

34. (Currently Amended) The method of claim 3332 in which the medium with the particles is disposed in a coating of a plurality of superimposed layers on the article surface, each of the plurality of superimposed layers containing the particles.

35. (Canceled)

36. (Previously Presented) The method of claim 32, wherein the article surface is curved.

37. (Canceled)

38. (Previously Presented) The method of claim 26, wherein the article surface is curved.

39. (Previously Presented) The method of claim 34, wherein the article surface is curved.